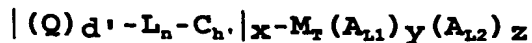


WHAT IS CLAIMED IS:

1. A method for imaging a thrombus comprising the steps of:
 - a. localizing a radiolabelled compound at the thrombus;
 - b. acquiring image slices representing a physical property of the radiolabelled thrombus;
 - c. assembling the image slices into a three-dimensional matrix of data;
 - d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and
 - e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.
2. The method of Claim 1 wherein the localization step comprises the step of localizing a compound that preferentially binds to activated platelets of the thrombus.
3. The method of Claim 2 wherein the localization step comprises the step of localizing a compound that binds to activated platelets of the thrombus via the glycoprotein IIb/IIIa receptor.
4. The method of Claim 3 wherein the localization step comprises the step of localizing a compound of the formula (I), and pharmaceutically acceptable salts thereof, at the thrombus:



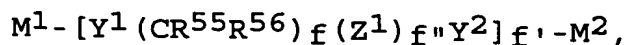
(I),

wherein,

Q is a glycoprotein IIb/IIIa binding compound;

d' is 1 - 20;

Ln is a linking group of formula:



wherein:

M^1 is $-[(CH_2)_g Z^1]_{g'} - (CR^{55}R^{56})_{g''} -$;

M^2 is $-(CR^{55}R^{56})_{g''} - [Z^1 (CH_2)_g]_{g'} -$;

g is independently 0-10;

g' is independently 0-1;

g'' is independently 0-10;

f is independently 0-10;

f' is independently 0-10;

f'' is independently 0-1;

Y^1 and Y^2 , are independently selected at each occurrence from: a bond, O, NR^{56} , $C=O$, $C(=O)O$, $OC(=O)O$, $C(=O)NH-$, $C=NR^{56}$, S, SO, SO_2 , SO_3 , $NHC(=O)$, $(NH)_2C(=O)$, and $(NH)_2C=S$;

Z^1 is independently selected at each occurrence from a C_6 - C_{14} saturated, partially saturated, or aromatic carbocyclic ring system, substituted with 0-4 R^{57} ; and a heterocyclic ring system, substituted with 0-4 R^{57} ;

R⁵⁵ and R⁵⁶ are independently selected at each occurrence from: hydrogen; C₁-C₁₀ alkyl substituted with 0-5 R⁵⁷; and alkaryl wherein the aryl is substituted with 0-5 R⁵⁷;

R⁵⁷ is independently selected at each occurrence from the group: hydrogen, OH, NHR⁵⁸, C(=O)R⁵⁸, OC(=O)R⁵⁸, OC(=O)OR⁵⁸, C(=O)OR⁵⁸, C(=O)NR⁵⁸, C≡N, SR⁵⁸, SOR⁵⁸, SO₂R⁵⁸, NHC(=O)R⁵⁸, NHC(=O)NHR⁵⁸, NHC(=S)NHR⁵⁸; or, alternatively, when attached to an additional molecule Q, R⁵⁷ is independently selected at each occurrence from the group: O, NR⁵⁸, C=O, C(=O)O, OC(=O)O, C(=O)N-, C=NR⁵⁸, S, SO, SO₂, SO₃, NHC(=O), (NH)₂C(=O), (NH)₂C=S; and,

R⁵⁸ is independently selected at each occurrence from the group: hydrogen; C₁-C₆ alkyl; benzyl, and phenyl;

M_r is a transition metal radionuclide;

C_h is a radionuclide metal chelator or bonding unit bound to the transition metal radionuclide selected from the group consisting of: R⁴⁰N=N⁺=, R⁴⁰R⁴¹N-N=, R⁴⁰N=, or R⁴⁰N=N(H)-;

R⁴⁰ is independently selected at each occurrence from the group: a bond to L_n, C₁-C₁₀ alkyl substituted with 0-3 R⁵², aryl substituted with 0-3 R⁵², cycloalkyl substituted with 0-3 R⁵², heterocycle substituted with 0-3 R⁵², heterocycloalkyl substituted with 0-3 R⁵², aralkyl substituted with 0-3 R⁵² and alkaryl substituted with 0-3 R⁵²;

R⁴¹ is independently selected from the group: hydrogen, aryl substituted with 0-3 R⁵², C₁-C₁₀ alkyl substituted with 0-3 R⁵², and a heterocycle substituted with 0-3 R⁵²;

R⁵² is independently selected at each occurrence from the group: a bond to L_n, =O, F, Cl, Br, I, -CF₃, -CN, -CO₂R⁵³, -C(=O)R⁵³, -C(=O)N(R⁵³)₂, -CHO, -CH₂OR⁵³, -OC(=O)R⁵³, -OC(=O)OR^{53a}, -OR⁵³, -OC(=O)N(R⁵³)₂, -NR⁵³C(=O)R⁵³, -NR⁵⁴C(=O)OR^{53a}, -NR⁵³C(=O)N(R⁵³)₂, -NR⁵⁴SO₂N(R⁵³)₂, -NR⁵⁴SO₂R^{53a}, -SO₃H, -SO₂R^{53a}, -SR⁵³, -S(=O)R^{53a}, -SO₂N(R⁵³)₂, -N(R⁵³)₂, -NHC(=NH)NHR⁵³, -C(=NH)NHR⁵³, =NOR⁵³, NO₂, -C(=O)NHOR⁵³, -C(=O)NHN(R⁵³)R^{53a}, -OCH₂CO₂H, 2-(1-morpholino)ethoxy;

R⁵³, R^{53a}, and R⁵⁴ are each independently selected at each occurrence from the group: hydrogen, C₁-C₆ alkyl, and a bond to L_n;

A_{L1} is a first ligand wherein each of the y first ligands are selected from the group consisting of: dioxygen ligands, functionalized aminocarboxylates, halides, and combinations thereof;

A_{L2} is a second ligand wherein each of the z second ligands are selected from the group consisting of: trisubstituted phosphines, trisubstituted arsines, tetrasubstituted diphosphines, tetrasubstituted diarsines, and combinations thereof;

x is independently 1-2;

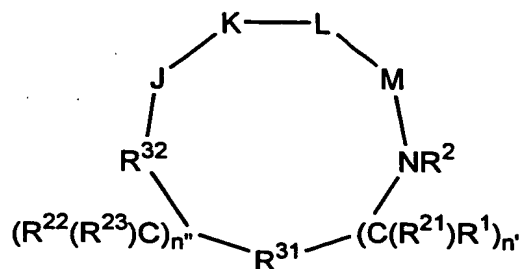
y is independently 1-2; and

z is independently 0-4.

5. The method of Claim 4 wherein M_r is selected from the group consisting of: technetium-99m, rhenium-186, and rhenium-188.

6. The method of Claim 4 wherein the localization step comprises the step of localizing a compound of the

formula (I) at the thrombus wherein Q is of the formula (II),



or a pharmaceutically acceptable salt or prodrug form thereof wherein:

R³¹ is a C₆-C₁₄ saturated, partially saturated, or aromatic carbocyclic ring system substituted with 0-4 R¹⁰ or R^{10a};

R³² is selected from:

- C(=O)-;
- C(=S)-
- S(=O)₂-;
- S(=O)-;
- P(=Z)(ZR¹³)-;

Z is S or O;

n'' and n' are independently 0-2;

R¹ and R²² are independently selected from the following groups:

hydrogen,

C₁-C₈ alkyl substituted with 0-2 R¹¹;

C₂-C₈ alkenyl substituted with 0-2 R¹¹;

C₂-C₈ alkynyl substituted with 0-2 R¹¹;
C₃-C₁₀ cycloalkyl substituted with 0-2 R¹¹;

aryl substituted with 0-2 R¹²;

a 5-10-membered heterocyclic ring system containing
1-4 heteroatoms independently selected from N, S,
and O, said heterocyclic ring being substituted with
0-2 R¹²;

=O, F, Cl, Br, I, -CF₃, -CN, -CO₂R¹³, -C(=O)R¹³,
-C(=O)N(R¹³)₂, -CHO, -CH₂OR¹³, -OC(=O)R¹³,
-OC(=O)OR^{13a}, -OR¹³, -OC(=O)N(R¹³)₂, -NR¹³C(=O)R¹³,
-NR¹⁴C(=O)OR^{13a}, -NR¹³C(=O)N(R¹³)₂, -NR¹⁴SO₂N(R¹³)₂,
-NR¹⁴SO₂R^{13a}, -SO₃H, -SO₂R^{13a}, -SR¹³, -S(=O)R^{13a},
-SO₂N(R¹³)₂, -N(R¹³)₂, -NHC(=NH)NHR¹³, -C(=NH)NHR¹³,
=NOR¹³, NO₂, -C(=O)NHR¹³, -C(=O)NHN(R¹³)R^{13a},
-OCH₂CO₂H, 2-(1-morpholino)ethoxy;

R¹ and R²¹ can alternatively join to form a 3-7 membered
carbocyclic ring substituted with 0-2 R¹²;

when n' is 2, R¹ or R²¹ can alternatively be taken
together with R¹ or R²¹ on an adjacent carbon atom to
form a direct bond, thereby to form a double or triple
bond between said carbon atoms;

R²² and R²³ can alternatively join to form a 3-7 membered
carbocyclic ring substituted with 0-2 R¹²;

when n" is 2, R²² or R²³ can alternatively be taken
together with R²² or R²³ on an adjacent carbon atom to
form a direct bond, thereby to form a double or triple
bond between the adjacent carbon atoms;

R¹ and R², where R²¹ is H, can alternatively join to form
a 5-8 membered carbocyclic ring substituted with 0-2 R¹²;

R¹¹ is selected from one or more of the following:

=O, F, Cl, Br, I, -CF₃, -CN, -CO₂R¹³, -C(=O)R¹³,
-C(=O)N(R¹³)₂, -CHO, -CH₂OR¹³, -OC(=O)R¹³,
-OC(=O)OR^{13a}, -OR¹³, -OC(=O)N(R¹³)₂, -NR¹³C(=O)R¹³,
-NR¹⁴C(=O)OR^{13a}, -NR¹³C(=O)N(R¹³)₂, -NR¹⁴SO₂N(R¹³)₂,
-NR¹⁴SO₂R^{13a}, -SO₃H, -SO₂R^{13a}, -SR¹³, -S(=O)R^{13a},
-SO₂N(R¹³)₂, -N(R¹³)₂, -NHC(=NH)NHR¹³, -C(=NH)NHR¹³,
=NOR¹³, NO₂, -C(=O)NHOR¹³, -C(=O)NHN¹³R^{13a},
-OCH₂CO₂H, 2-(1-morpholino)ethoxy,

C₁-C₅ alkyl, C₂-C₄ alkenyl, C₃-C₆ cycloalkyl, C₃-C₆
cycloalkylmethyl, C₂-C₆ alkoxyalkyl, C₃-C₆
cycloalkoxy, C₁-C₄ alkyl (alkyl being substituted
with 1-5 groups selected independently from:
-NR¹³R¹⁴, -CF₃, NO₂, -SO₂R^{13a}, or -S(=O)R^{13a}),

aryl substituted with 0-2 R¹²,

a 5-10-membered heterocyclic ring system containing
1-4 heteroatoms independently selected from N, S,
and O, said heterocyclic ring being substituted with
0-2 R¹²;

R¹² is selected from one or more of the following:

phenyl, benzyl, phenethyl, phenoxy, benzyloxy,
halogen, hydroxy, nitro, cyano, C₁-C₅ alkyl, C₃-C₆
cycloalkyl, C₃-C₆ cycloalkylmethyl, C₇-C₁₀
arylalkyl, C₁-C₅ alkoxy, -CO₂R¹³, -C(=O)NHOR^{13a},
-C(=O)NHN(R¹³)₂, =NOR¹³, -B(R³⁴)(R³⁵), C₃-C₆
cycloalkoxy, -OC(=O)R¹³, -C(=O)R¹³, -OC(=O)OR^{13a},
-OR¹³, -(C₁-C₄ alkyl)-OR¹³, -N(R¹³)₂,
-OC(=O)N(R¹³)₂, -NR¹³C(=O)R¹³, -NR¹³C(=O)OR^{13a},
-NR¹³C(=O)N(R¹³)₂, -NR¹³SO₂N(R¹³)₂, -NR¹³SO₂R^{13a},
-SO₃H, -SO₂R^{13a}, -S(=O)R^{13a}, -SR¹³, -SO₂N(R¹³)₂,
C₂-C₆ alkoxyalkyl, methylenedioxy, ethylenedioxy,

C1-C4 haloalkyl, C1-C4 haloalkoxy, C1-C4 alkylcarbonyloxy, C1-C4 alkylcarbonyl, C1-C4 alkylcarbonylamino, -OCH₂CO₂H, 2-(1-morpholino)ethoxy, C1-C4 alkyl (alkyl being substituted with -N(R¹³)₂, -CF₃, NO₂, or -S(=O)R^{13a});

R¹³ is selected independently from: H, C₁-C₁₀ alkyl, C₃-C₁₀ cycloalkyl, C₄-C₁₂ alkylcycloalkyl, aryl, -(C₁-C₁₀ alkyl)aryl, or C₃-C₁₀ alkoxyalkyl;

R^{13a} is C₁-C₁₀ alkyl, C₃-C₁₀ cycloalkyl, C₄-C₁₂ alkylcycloalkyl, aryl, -(C₁-C₁₀ alkyl)aryl, or C₃-C₁₀ alkoxyalkyl;

when two R¹³ groups are bonded to a single N, said R¹³ groups may alternatively be taken together to form -(CH₂)₂₋₅- or -(CH₂)C(CH₂)-;

R¹⁴ is OH, H, C₁-C₄ alkyl, or benzyl;

R²¹ and R²³ are independently selected from:

hydrogen;

C₁-C₄ alkyl, optionally substituted with 1-6 halogen;

benzyl;

R² is H or C₁-C₈ alkyl;

R¹⁰ and R^{10a} are selected independently from one or more of the following:

phenyl, benzyl, phenethyl, phenoxy, benzyloxy, halogen, hydroxy, nitro, cyano, C₁-C₅ alkyl, C₃-C₆ cycloalkyl, C₃-C₆ cycloalkylmethyl, C₇-C₁₀ arylalkyl, C₁-C₅ alkoxy, -CO₂R¹³, -C(=O)N(R¹³)₂,

$-C(=O)NHOR^{13a}$, $-C(=O)NHN(R^{13})_2$, $=NOR^{13}$,
 $-B(R^{34})(R^{35})$, C₃-C₆ cycloalkoxy, $-OC(=O)R^{13}$,
 $-C(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-(C_1-C_4 \text{ alkyl})-OR^{13}$,
 $-N(R^{13})_2$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$,
 $-NR^{13}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{13}SO_2N(R^{13})_2$,
 $-NR^{13}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-S(=O)R^{13a}$, $-SR^{13}$,
 $-SO_2N(R^{13})_2$, C₂-C₆ alkoxyalkyl, methylenedioxy,
 ethylenedioxy, C₁-C₄ haloalkyl (including $-C_vF_w$
 where $v = 1$ to 3 and $w = 1$ to $(2v+1)$), C₁-C₄
 haloalkoxy, C₁-C₄ alkylcarbonyloxy, C₁-C₄
 alkylcarbonyl, C₁-C₄ alkylcarbonylamino, $-OCH_2CO_2H$,
 2-(1-morpholino)ethoxy, C₁-C₄ alkyl (alkyl being
 substituted with $-N(R^{13})_2$, $-CF_3$, NO_2 , or
 $-S(=O)R^{13a}$);

J is 3-aminopropionic acid or an L-isomer or D-isomer
 amino acid of structure $-N(R^3)C(R^4)(R^5)C(=O)-$, wherein:

R³ is H or C₁-C₈ alkyl;

R⁴ is H or C₁-C₃ alkyl;

R⁵ is selected from:

hydrogen;

C₁-C₈ alkyl substituted with 0-2 R¹¹;

C₂-C₈ alkenyl substituted with 0-2 R¹¹;

C₂-C₈ alkynyl substituted with 0-2 R¹¹;

C₃-C₁₀ cycloalkyl substituted with 0-2 R¹¹;

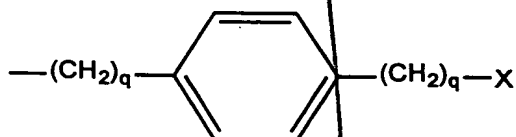
aryl substituted with 0-2 R¹²;

a 5-10-membered heterocyclic ring system containing
 1-4 heteroatoms independently selected from N, S, or
 O, said heterocyclic ring being substituted with 0-2
 R¹²;

$=O$, F, Cl, Br, I, $-CF_3$, $-CN$, $-CO_2R^{13}$, $-C(=O)R^{13}$,

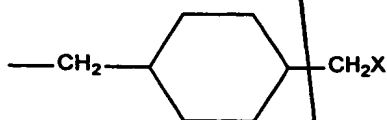
$-\text{C}(=\text{O})\text{N}(\text{R}^{13})_2$, $-\text{CHO}$, $-\text{CH}_2\text{OR}^{13}$, $-\text{OC}(=\text{O})\text{R}^{13}$,
 $-\text{OC}(=\text{O})\text{OR}^{13a}$, $-\text{OR}^{13}$, $-\text{OC}(=\text{O})\text{N}(\text{R}^{13})_2$, $-\text{NR}^{13}\text{C}(=\text{O})\text{R}^{13}$,
 $-\text{NR}^{14}\text{C}(=\text{O})\text{OR}^{13a}$, $-\text{NR}^{13}\text{C}(=\text{O})\text{N}(\text{R}^{13})_2$, $-\text{NR}^{14}\text{SO}_2\text{N}(\text{R}^{13})_2$,
 $-\text{NR}^{14}\text{SO}_2\text{R}^{13a}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{R}^{13a}$, $-\text{SR}^{13}$, $-\text{S}(=\text{O})\text{R}^{13a}$,
 $-\text{SO}_2\text{N}(\text{R}^{13})_2$, $-\text{N}(\text{R}^{13})_2$, $-\text{NHC}(=\text{NH})\text{NHR}^{13}$, $-\text{C}(=\text{NH})\text{NHR}^{13}$,
 $=\text{NOR}^{13}$, NO_2 , $-\text{C}(=\text{O})\text{NHOR}^{13}$, $-\text{C}(=\text{O})\text{NHN}(\text{R}^{13})\text{R}^{13a}$, $=\text{NOR}^{13}$,
 $-\text{B}(\text{R}^{34})(\text{R}^{35})$, $-\text{OCH}_2\text{CO}_2\text{H}$, $2-(1\text{-morpholino})\text{ethoxy}$,
 $-\text{SC}(=\text{NH})\text{NHR}^{13}$, N_3 , $-\text{Si}(\text{CH}_3)_3$, $(\text{C}_1\text{-C}_5 \text{ alkyl})\text{NHR}^{16}$;

$-(\text{C}_0\text{-C}_6 \text{ alkyl})\text{X}$;



, where q is

independently 0,1;



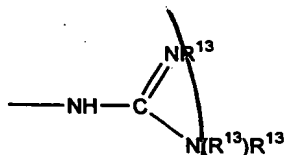
;

$-(\text{CH}_2)_m\text{S}(\text{O})_{p'}(\text{CH}_2)_2\text{X}$, where $m = 1,2$ and $p' = 0-2$;

wherein X is defined below; and

R^3 and R^4 may also be taken together to form





;

R³ and R⁵ can alternatively be taken together to form
-(CH₂)_t- or -CH₂S(O)_{p'}C(CH₃)₂-, where t = 2-4 and p' =
0-2; or

R⁴ and R⁵ can alternatively be taken together to form
-(CH₂)_u-, where u = 2-5;

R¹⁶ is selected from:

an amine protecting group;

1-2 amino acids;

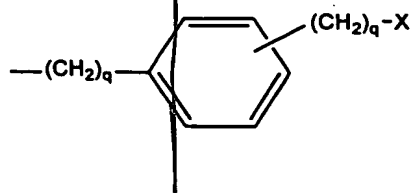
1-2 amino acids substituted with an amine protecting
group;

K is a D-isomer or L-isomer amino acid of structure
-(R⁶)CH(R⁷)C(=O)-, wherein:

R⁶ is H or C₁-C₈ alkyl;

R⁷ is selected from:

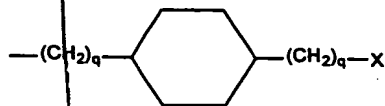
-(C₁-C₇ alkyl)X;



, wherein each q is

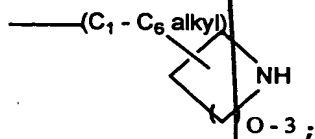
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independently 0-2 and substitution on the phenyl is at the 3 or 4 position;



, wherein each

q is independently 0-2 and substitution on the cyclohexyl is at the 3 or 4 position;



$-(CH_2)_m\text{O}-(C_1-C_4 \text{ alkyl})-X$, where $m = 1$ or 2 ;

$-(CH_2)_m\text{S}(\text{O})_{p'}-(C_1-C_4 \text{ alkyl})-X$, where $m = 1$ or 2 and $p' = 0-2$; and

X is selected from:



;

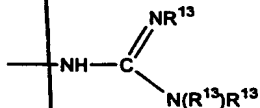
$-\text{N}(\text{R}^{13})\text{R}^{13}$; $-\text{C}(=\text{NH})(\text{NH}_2)$; $-\text{SC}(=\text{NH})-\text{NH}_2$; $-\text{NH}-\text{C}(=\text{NH})(\text{NHCN})$;
 $-\text{NH}-\text{C}(=\text{NCN})(\text{NH}_2)$; $-\text{NH}-\text{C}(=\text{N}-\text{OR}^{13})(\text{NH}_2)$;

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R⁶ and R⁷ can alternatively be taken together to form

$$\text{---}(\text{CH}_2)_q\overset{\overset{(\text{CH}_2)_n\text{X}}{|}}{\text{CH}}(\text{CH}_2)_q\text{---}$$
, wherein each q is independently 1 or 2 and wherein n = 0 or 1 and X is -NH₂ or

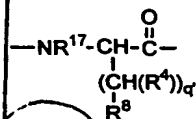


;

L is -Y(CH₂)_vC(=O)-, wherein:

Y is NH, N(C₁-C₃ alkyl), O, or S; and v = 1 or 2;

M is a D-isomer or L-isomer amino acid of structure



, wherein:

q' is 0-2;

R¹⁷ is H, C₁-C₃ alkyl;

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del
A,
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R⁸ is selected from:

-CO₂R¹³, -SO₃R¹³, -SO₂NHR¹⁴, -B(R³⁴)(R³⁵), -NHSO₂CF₃,
-CONHNHSO₂CF₃, -PO(OR¹³)₂, -PO(OR¹³)R¹³,
-SO₂NH-heteroaryl (said heteroaryl being
5-10-membered and having 1-4 heteroatoms selected
independently from N, S, or O), -SO₂NH-heteroaryl
(said heteroaryl being 5-10-membered and having 1-4
heteroatoms selected independently from N, S, or O),
-SO₂NHCOR¹³, -CONHSO₂R^{13a}, -CH₂CONHSO₂R^{13a},
-NHSO₂NHCOR^{13a}, -NHCONHSO₂R^{13a}, -SO₂NHCONHR¹³;

R³⁴ and R³⁵ are independently selected from:

-OH,
-F,
-N(R¹³)₂, or
C₁-C₈-alkoxy;

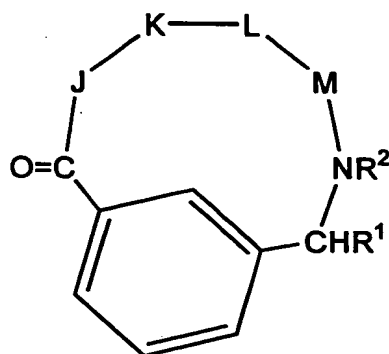
R³⁴ and R³⁵ can alternatively be taken together form:

a cyclic boron ester where said chain or ring
contains from 2 to 20 carbon atoms and, optionally,
1-4 heteroatoms independently selected from N, S, or
O;

a divalent cyclic boron amide where said chain or
ring contains from 2 to 20 carbon atoms and,
optionally, 1-4 heteroatoms independently selected
from N, S, or O;

a cyclic boron amide-ester where said chain or ring
contains from 2 to 20 carbon atoms and, optionally,
1-4 heteroatoms independently selected from N, S, or
O.

7. The method of Claim 6 wherein the localization step
comprises the step of localizing a compound of the
formula (I) at the thrombus wherein Q is of the formula
(III),



(III)

or a pharmaceutically acceptable salt or prodrug form thereof wherein:

the shown phenyl ring may be further substituted with 0-3 R^{10} ;

R^{10} is selected independently from: H, C_1 - C_8 alkyl, phenyl, halogen, or C_1 - C_4 alkoxy;

R^1 is H, C_1 - C_4 alkyl, phenyl, benzyl, or phenyl- $(C_1$ - $C_4)$ alkyl;

R^2 is H or methyl;

R^{13} is selected independently from: H, C_1 - C_{10} alkyl, C_3 - C_{10} cycloalkyl, C_4 - C_{12} alkylcycloalkyl, aryl, $-(C_1$ - C_{10} alkyl)aryl, or C_3 - C_{10} alkoxyalkyl;

R^{13a} is C_1 - C_{10} alkyl, C_3 - C_{10} cycloalkyl, C_4 - C_{12} alkylcycloalkyl, aryl, $-(C_1$ - C_{10} alkyl)aryl, or C_3 - C_{10} alkoxyalkyl;

when two R¹³ groups are bonded to a single N, said R¹³ groups may alternatively be taken together to form - (CH₂)₂₋₅- or - (CH₂)O(CH₂)-;

R¹⁴ is OH, H, C₁-C₄ alkyl, or benzyl;

J is β-alanine or an L-isomer or D-isomer amino acid of structure -N(R³)C(R⁴)(R⁵)C(=O)-, wherein:

R³ is H or CH₃;

R⁴ is H or C₁-C₃ alkyl;

R⁵ is H, C₁-C₈ alkyl, C₃-C₆ cycloalkyl, C₃-C₆ cycloalkylmethyl, C₁-C₆ cycloalkylethyl, phenyl, phenylmethyl, CH₂OH, CH₂SH, CH₂OCH₃, CH₂SCH₃, CH₂CH₂SCH₃, (CH₂)_sNH₂, - (CH₂)_sNHC(=NH)(NH₂), - (CH₂)_sNHR¹⁶, where s = 3-5; or

R¹⁶ is selected from:

an amine protecting group;

1-2 amino acids; or

1-2 amino acids substituted with an amine protecting group;

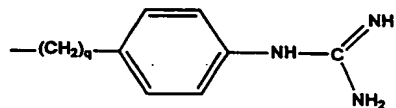
R³ and R⁵ can alternatively be taken together to form -CH₂CH₂CH₂-; or

R⁴ and R⁵ can alternatively be taken together to form - (CH₂)_u-, where u = 2-5;

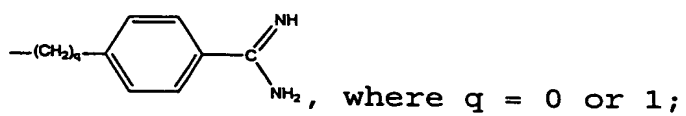
K is an L-isomer amino acid of structure -N(R⁶)CH(R⁷)C(=O)-, wherein:

R⁶ is H or C₁-C₈ alkyl;

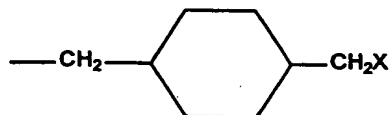
R⁷ is:



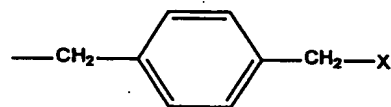
;



$-(\text{CH}_2)_r\text{X}$, where $r = 3-6$;



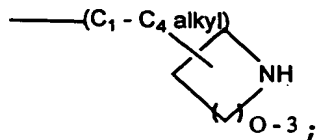
;



;

$-(\text{CH}_2)_m\text{S}(\text{CH}_2)_2\text{X}$, where $m = 1 \text{ or } 2$;

$-(\text{C}_3-\text{C}_7 \text{ alkyl})-\text{NH}-(\text{C}_1-\text{C}_6 \text{ alkyl})$;

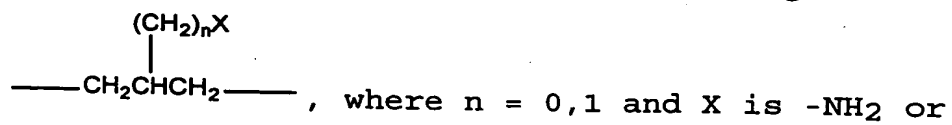


$-(\text{CH}_2)_m\text{-O-}(\text{C}_1\text{-C}_4 \text{ alkyl})\text{-NH-}(\text{C}_1\text{-C}_6 \text{ alkyl})$, where $m = 1$ or 2 ;

$-(\text{CH}_2)_m\text{-S-}(\text{C}_1\text{-C}_4 \text{ alkyl})\text{-NH-}(\text{C}_1\text{-C}_6 \text{ alkyl})$, where $m = 1$ or 2 ; and

X is $-\text{NH}_2$ or $-\text{NHC}(=\text{NH})(\text{NH}_2)$, provided that X is not $-\text{NH}_2$ when $r = 4$; or

R^6 and R^7 are alternatively be taken together to form

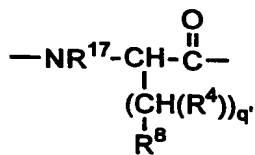


$-\text{NHC}(=\text{NH})(\text{NH}_2)$;

L is $-\text{Y}(\text{CH}_2)_v\text{C}(=\text{O})-$, wherein:

Y is NH, O, or S; and $v = 1, 2$;

M is a D-isomer or L-isomer amino acid of structure



, wherein:

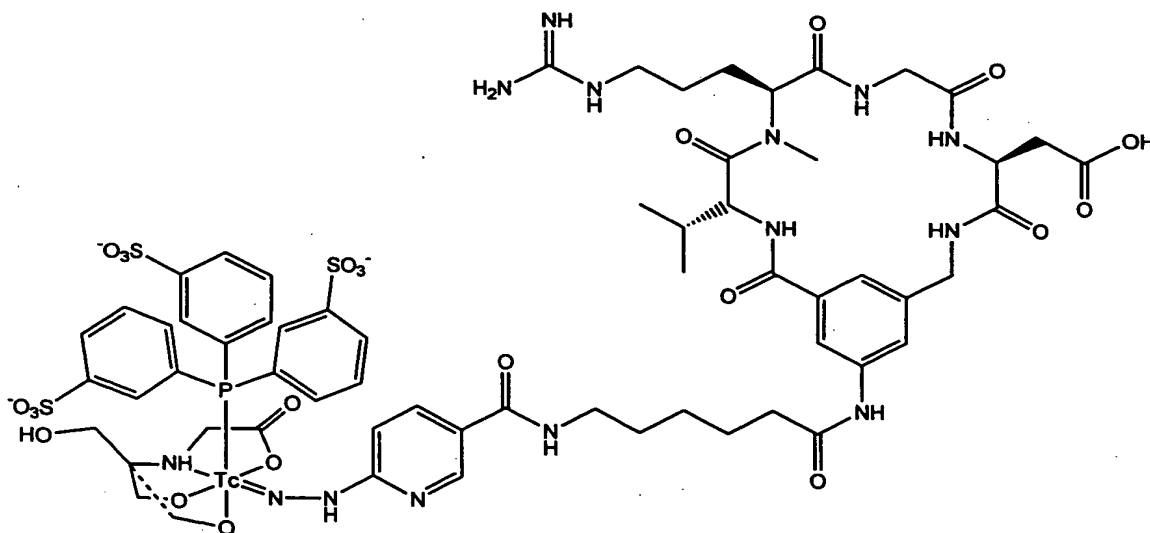
q' is 0-2;

R¹⁷ is H, C₁-C₃ alkyl;

R⁸ is selected from:

-CO₂R¹³, -SO₃R¹³, -SO₂NHR¹⁴, -B(R³⁴)(R³⁵), -NHSO₂CF₃,
-CONHNHSO₂CF₃, -PO(OR¹³)₂, -PO(OR¹³)R¹³,
-SO₂NH-heteroaryl (said heteroaryl being
5-10-membered and having 1-4 heteroatoms selected
independently from N, S, or O), -SO₂NH-heteroaryl
(said heteroaryl being 5-10-membered and having 1-4
heteroatoms selected independently from N, S, or O),
-SO₂NHCOR¹³, -CONHSO₂R^{13a}, -CH₂CONHSO₂R^{13a},
-NHSO₂NHCOR^{13a}, -NHCONHSO₂R^{13a}, -SO₂NHCONHR¹³.

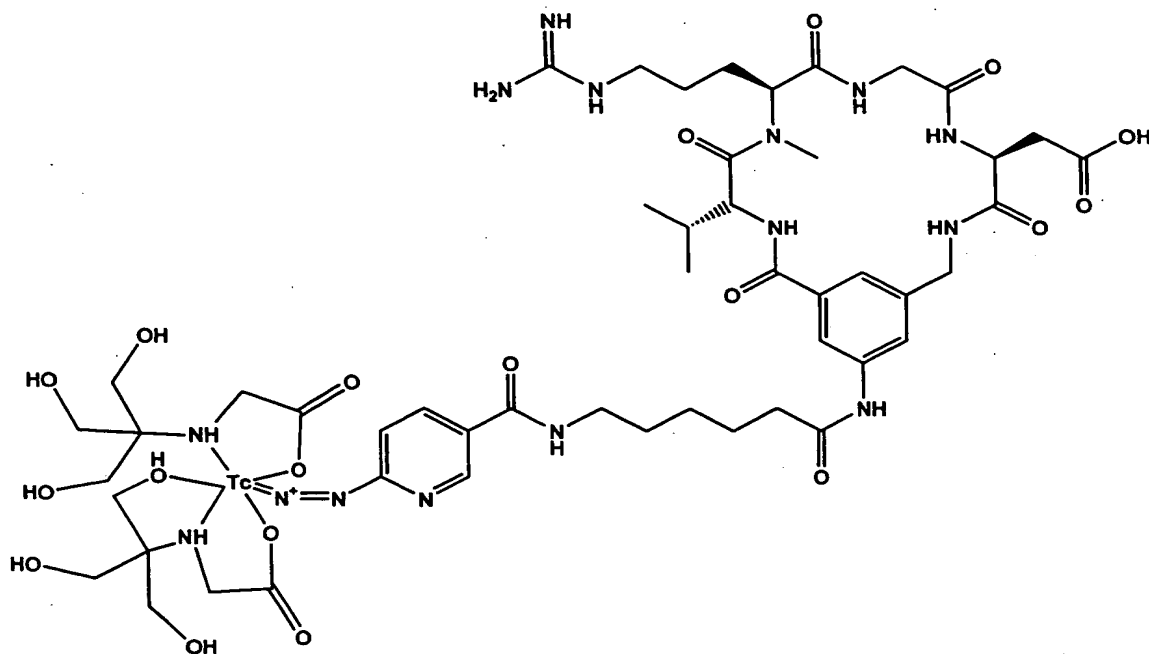
8. The method of Claim 4 wherein the localization step comprises the step of localizing a compound of the formula (IV) at the thrombus:



(IV).

9. The method of Claim 4 wherein the localization step

comprises the step of localizing a compound of the formula (V) at the thrombus:



(V) .

10. The method of Claim 1 wherein the acquisition step comprises the step of acquiring image slices representing a concentration of radioactivity associated with the thrombus.
11. The method of Claim 10 wherein the acquisition step comprises the step of acquiring single photon emission computed tomography images of the thrombus.
12. The method of Claim 1 wherein the acquisition step comprises the step of acquiring transaxial image slices and further comprising the step of reformatting the transaxial image slices into image slices that are parallel to a long axis associated with the thrombus.
13. The method of Claim 1 comprising the step of displaying the two-dimensional array as a reprojected image.

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14. The method of Claim 1 wherein the scanning step is performed at a series of angles.
15. The method of Claim 14 wherein the assignment step is performed at each of the series of angles.
16. The method of Claim 15 comprising the step of sequentially displaying the two-dimensional arrays as reprojected images.
17. A method for imaging a pulmonary embolus comprising the steps of:
 - a. localizing a radiolabelled compound at the pulmonary embolus;
 - b. acquiring image slices representing a physical property of the radiolabelled pulmonary embolus;
 - c. assembling the image slices into a three-dimensional matrix of data;
 - d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and
 - e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.
18. A method for imaging an arterial thrombus comprising the steps of:
 - a. localizing a radiolabelled compound at the arterial thrombus;
 - b. acquiring image slices representing a physical property of the radiolabelled arterial thrombus;
 - c. assembling the image slices into a three-dimensional matrix of data;
 - d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum

value along each line; and

- e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.

19. A method for imaging a coronary thrombus comprising the steps of:

- a. localizing a radiolabelled compound at the coronary thrombus;
- b. acquiring image slices representing a physical property of the radiolabelled coronary thrombus;
- c. assembling the image slices into a three-dimensional matrix of data;
- d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and
- e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.

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